

Work Order ID 163519

Tuesday, June 27, 2017 1:29:15 PM

647.7401
B163519
REV. B

163519

Page 1

Item ID: 647.7401

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Upper Cutter Assembly

Start Date: 6/27/2017 Start Qty: 1.00

1

Cust Item ID:

Required Date: 7/3/2017 Req'd Qty: 1.00

1

Customer:

Reference:

JUN 28 2017

Approvals:

Process Plan:

DAS

Date: 6/27/17

Tooling:

Date:

Run Start

NR1

QC:

21

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

647.7400

B

110

Pick Kit

0.00

110

Packaging

Memo

0.00

Packaging

JUL 27 2017

DAS
36
9-89

120

120

Small Fab

Memo

0.00

Small Fab

Assemble as per dwg and apply loctite 598 on all faying surfaces per note 2.

A/R RTV LOCTITE 598: 137979
exp. date: 04/17

12

17/08/02

DAS
36
9-89

130

130

QC

QC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

Quality Control

DAS
38
9-89

AUG 02 2017

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QS1042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Work Order ID 163519

Tuesday, June 27, 2017 1:29:15 PM

163519

Page 2

Item ID: 647.7401

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Upper Cutter Assembly

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Cust Item ID:

Required Date: 7/3/2017 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run

Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

140

Identify as per dwg & Stock Location

CCF032

0.00

140

Packaging

Memo

0.00

Packaging

***IDENTIFY AS PER APICAL MPP-120 BY STAMPING THE P# AND
REV***/
DAS
6
9-89**AUG 03 2017**

150

QC21- Final Inspection - Work Order Release

0.00

150

QC

Memo

0.00

Quality Control

DAS
21
9-89**17/8/3**
AUG 03 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
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Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Picklist Print

Tuesday, June 27, 2017 1:29:18 PM

Page 1

Work Order ID: 163519

163519

Parent Item: 647.7401

647 7401

Parent Item Name: Upper Cutter Assembly

Start Date: 6/27/2017

Required Date: 7/3/2017

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A 12.10.04 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
647.7812 *647 7812* Center Plate, Upper		Manufactured	No			110	Each	3.0000	1	1			DAS 6 9-89
** JUL 27 2017													
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				CKK114		3							
				138505		3							
647.7810 *647 7810* Bracket A		Manufactured	No			110	Each	0.0000	1	1			DAS 6 9-89
** 161740													
647.7811 *647 7811* Bracket B		Manufactured	No			110	Each	0.0000	1	1			DAS 6 9-89
** 161708 JUL 27 2017													
646.3015 *646 3015* Blade		Manufactured	No			110	Each	9.0000	2	2			DAS 6 9-89
** JUL 27 2017													
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				cck103		9							
				160180		9							
647.7610 *647 7610* Upper Deflector		Manufactured	No			110	Each	7.0000	1	1			DAS 6 9-89
** JUL 27 2017													
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				cck066		7							
				137206		1							
				138533		6							

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐			
Design ☐	☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐			
Doc/Data ☐	☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐			
Equip/Tooling ☐	☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐			
Handling/Pre ☐	☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐			
Material ☐	☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐			
Internal Transport ☐	☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐			
Tribal Knowledge ☐	☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐			
LOA ☐	☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐			
Substation ☐	☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐			
Past Expiry Date ☐	☐	Manufacturing Process ☐	OTHER : _____						
Misidentified ☐	☐	Past Due ☐							

Picklist Print

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Page 2

Work Order ID: 163519

163519

Parent Item: 647.7401

647 7401

Parent Item Name: Upper Cutter Assembly

Start Date: 6/27/2017

Required Date: 7/3/2017

Start Qty: 1.00

Required Qty: 1.00

NAS1149FN832P

Purchased

No

110

Each

2,530.000

68

68

NAS1149FN832P

Washer

**

DAS

6

JUL 27 2017 9-89

Location

Loc Qty

Loc Code

GA

358

M135058

208

M136182

40

M136866

110

ST260a

1500

M137820

1500

ST263

672

M137412

672

MS27039-08-23

Purchased

No

110

Each

65.0000

7

7

MS27039-08-23

Screw

**

JUL 27 2017 AS

6

9-89

Location

Loc Qty

Loc Code

over006

50

m133523

50

ST277

15

m133498

15

MS27039-08-19

Purchased

No

110

Each

283.0000

6

6

MS27039-08-19

Screw

**

DAS

6

JUL 27 2017 9-89

Location

Loc Qty

Loc Code

GA

30

m135948

26

m137178

4

ST277

253

m137464

153

m137851

100

Tuesday, June 27, 2017 1:29:18 PM

Shop Packet Print

Page 2

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Picklist Print

Tuesday, June 27, 2017 1:29:18 PM

Page 3

Work Order ID: 163519

163519

Parent Item: 647.7401

647 7401

Parent Item Name: Upper Cutter Assembly

Start Date: 6/27/2017

Required Date: 7/3/2017

Start Qty: 1.00

Required Qty: 1.00

MS21042-08 MS21042L08 Purchased No

110 Each 0.0000 13 13

MS21042-08

** 137730 JUL 27 2017 DAS

USE MS21042L08

NAS1149F0332P Purchased No

110 Each 2,236.000 6 6

NAS1149F0332P

** 9-89 6

Washer

JUL 27 2017 DAS 6 9-89

Location

Loc Qty

Loc Code

GA 275

m133709 275

ST262 1961

m137710 1961

MS27039-1-19 Purchased No

110 Each 283.0000 3 3

MS27039-1-19

** JUL 27 2017 DAS

Screw

Location

Loc Qty

Loc Code

GA 80

m134134 80

ST280 203

m137361 203

MS21042-3 MS21042L3 Purchased No

110 Each 0.0000 3 3

MS21042-3

** 137980 JUL 27 2017 DAS

Nut

6 9-89

Tuesday, June 27, 2017 1:29:18 PM

Shop Packet Print

Page 3

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

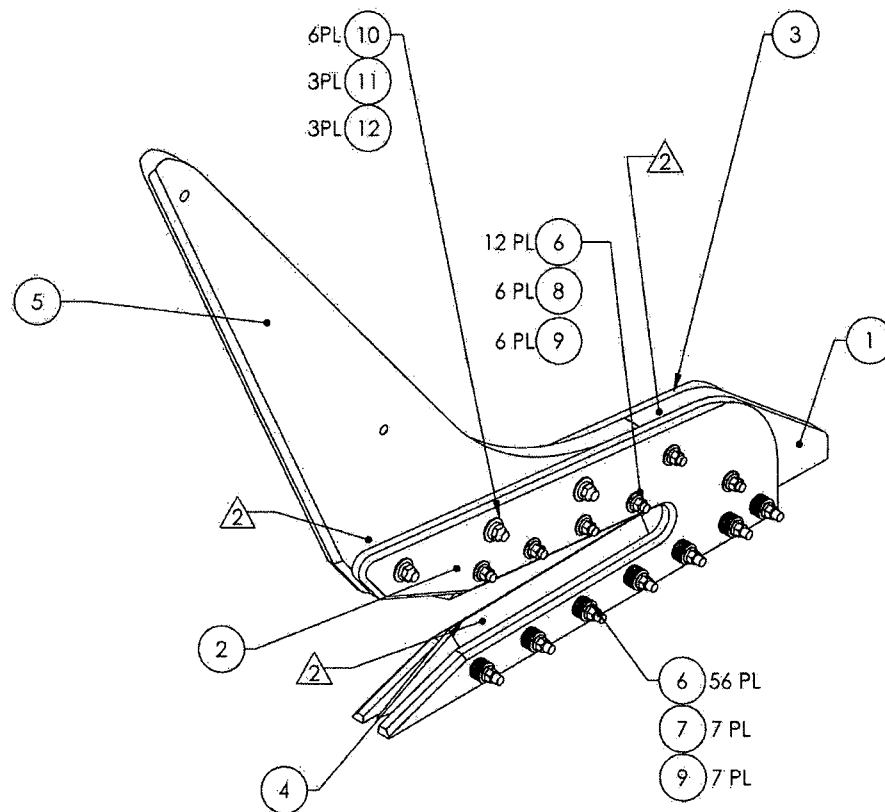
Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐			
Design ☐	☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐			
Doc/Data ☐	☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐			
Equip/Tooling ☐	☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐			
Handling/Pre ☐	☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐			
Material ☐	☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐			
Internal Transport ☐	☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐			
Tribal Knowledge ☐	☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐			
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Substation ☐	☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐			
Past Expiry Date ☐	☐	Manufacturing Process ☐	OTHER : _____						
Misidentified ☐	☐	Past Due ☐							

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.

NOTES:

1. IDENTIFY IAW MPP - 120

2. APPLY F/N 13 AS REQUIRED TO ALL FAYING SURFACES OF F/N 1, 2, 3, 4, & 5 UPON ASSEMBLY.

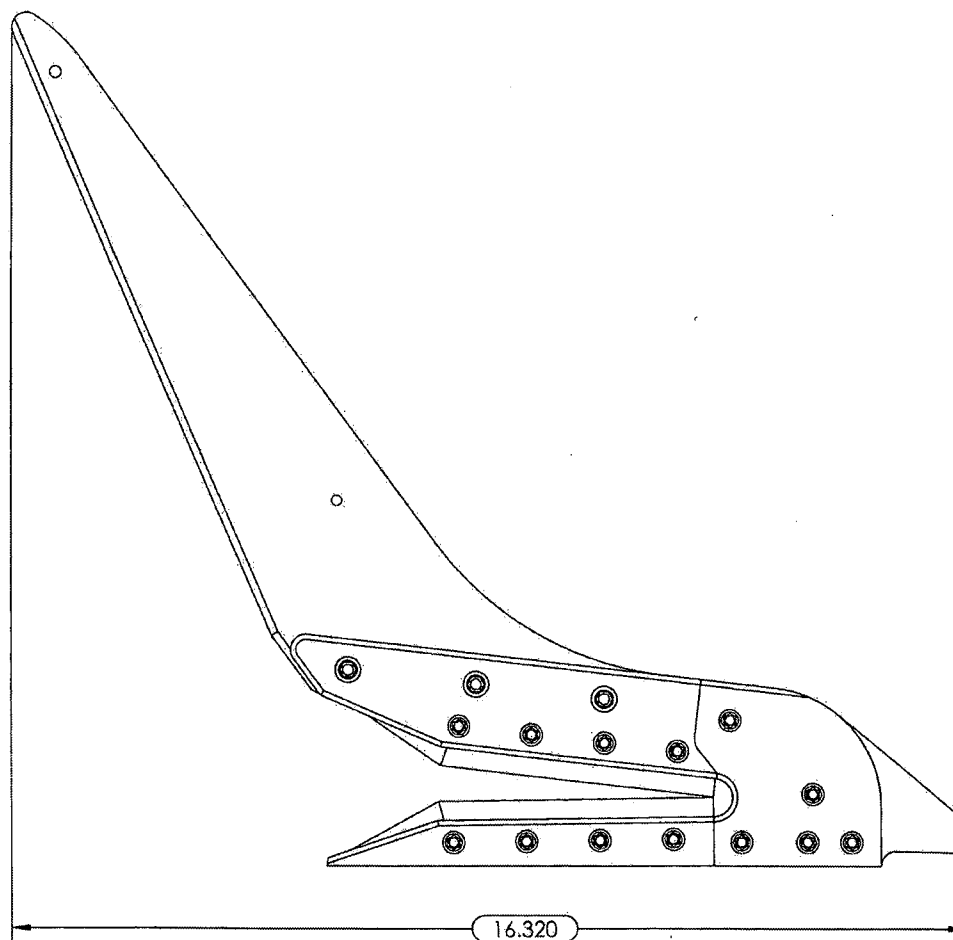
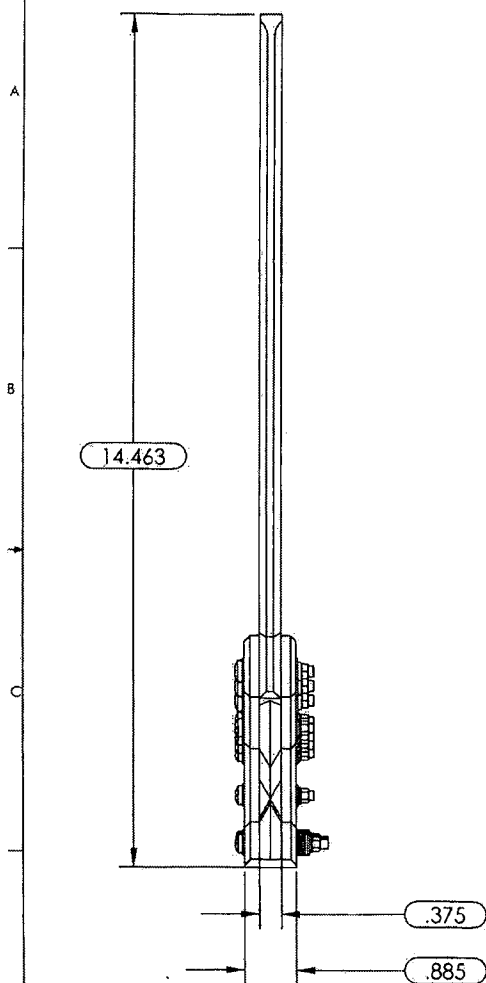


647.7401

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 163529 MWS
1706-28

A/R	13	601.2045	RTV, LOCTITE 598		
3	12	601.2943	LOCKNUT	MS21042-3	
3	11	601.1948	SCREW	MS27039-1-19	
6	10	601.1607	WASHER	NAS1149F0332P	
13	9	601.2973	LOCKNUT	MS21042-08	
6	8	601.2765	SCREW	MS27039-0819	
7	7	601.3123	SCREW	MS27039-0823	
68	6	601.2764	WASHER	NAS1149FN832P	
1	5	647.7610	UPPER DEFLECTOR		
2	4	646.3015	BLADE		
1	3	647.7811	BRACKET B		
1	2	647.7810	BRACKET A		
1	1	647.7812	CENTER PLATE		
		647.7401	UPPER CUTTER ASSY		2
7401	FIND #	PART #	DESCRIPTION	MAT'L	SPEC.
QTY			PARTS LIST		
NEXT ASSY (S)			APICAL INDUSTRIES		
647.7300			2508 TEMPLE HEIGHTS DR.		
			OCEANSIDE, CA. 92056-3512 (760)724-5300		
			UPPER CUTTER ASSY		
			SHEET 1 OF 2		
			DWG. NO. 647.7400		
			SCALE NONE		

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ORIGINAL DATE JUN 22 2009	APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92055-3512 (760)724-5300		
DRAWN BY A. CHAN			
CHECKED BY J. BRAYD			
DESIGNED BY J. BRAYD			
APPROVED BY J. BRAYD			
CONTRACT NO.	UPPER CUTTER ASSY		
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS DECIMALS 1/32 1/16 1/8 1/4 1/2 1 1 1/2 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100			
SIZE B	REV. CAGE CODE 07ML6	DWG NO. 647.7400	REV. B
SCALE NONE		SHEET 2 OF 2	

